

[4910-13-P]

### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2017-0049; Product Identifier 2017-CE-031-AD]

**RIN 2120-AA64** 

Airworthiness Directives; Textron Aviation Inc. Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Textron Aviation Inc. Models 172N, 172P, 172Q, 172RG, F172N, F172P, FR172K, R172K, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, T182, F182P, F182Q, F182RG, R182, TR182, 206, P206/TP206, U206/TU206, 207/T207, 210-5 (205), 210-5A (205A), 210B, 210C, 210D, 210E, 210F, and T210F airplanes. This proposed AD was prompted by a report of cracks found in the lower area of the forward cabin doorpost bulkhead. This proposed AD would require repetitively inspecting the lower forward doorpost at the strut attach fitting for cracks and making all necessary repairs. We are proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Textron Aviation Inc., Textron Aviation Customer Service, One Cessna Blvd., Wichita, Kansas 67215; telephone: (316) 517-5800; email: customercare@txtav.com; Internet: www.txtav.com. You may review this referenced service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2017-0049; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Bobbie Kroetch, Aerospace Engineer, Wichita ACO Branch, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4155; fax: (316) 946-4107; email: bobbie.kroetch@faa.gov or Wichita-COS@faa.gov.

### SUPPLEMENTARY INFORMATION:

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section.

Include "Docket No. FAA-2017-0049; Product Identifier 2017-CE-031-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this NPRM.

### **Discussion**

We received a report from an operator of one of the affected Textron Aviation Inc. model airplanes that cracks were found in the lower area of the forward cabin doorpost bulkhead. Further investigation revealed more than four dozen similar cracks on Textron Aviation Inc. 100 and 200 airplanes. It has been determined that the cracks result from metal fatigue.

This condition, if not detected and addressed, could result in failure of the wing strut attach point during operation, which could result in loss of control.

## Related Service Information under 1 CFR part 51

We reviewed Cessna Single Engine Accomplishment Instructions SEB95-19, dated December 29, 1995; and Cessna Single-Engine Accomplishment Instructions SEB93-5R1, Revision 1, dated September 8, 1995. As applicable, the service information describes procedures for repetitively inspecting the lower area of the forward cabin

doorposts for cracks and repairing any cracks found by modifying the area with the applicable Cessna service kit. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### Other Related Service Information

We reviewed Cessna Single Engine Service Bulletin SEB93-5, Revision 1, dated September 8, 1995, and Cessna Single Engine Service Bulletin SEB95-19, dated December 29, 1995. As applicable, these service bulletins provide the manufacturer's recommended compliance times for the initial and repetitive inspections.

These service bulletins also specify a terminating action for the repetitive inspections when the applicable Cessna repair service kit is installed if cracks are found.

#### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **Proposed AD Requirements**

This proposed AD would require repetitively inspecting the lower area of the forward cabin doorposts for cracks and repairing any cracks found by modifying the area with the applicable Cessna service kit.

## **Costs of Compliance**

We estimate that this proposed AD affects 14,653 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

**Estimated costs** 

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspect the lower area of the forward cabin doorposts for cracks	1.5 work-hours <i>X</i> \$85 per hour = \$127.50	Not applicable	\$127.50	\$1,868,257.50

We estimate the following costs to do any necessary repairs that would be required based on the results of the proposed inspection. We have no way of determining the number of aircraft that might need this repair:

### **On-condition** costs

Action	Labor cost	Parts cost	Cost per product
Install Cessna Single-Engine	24 work-hours X \$85	\$646	\$2,686
Service Kit SK172-147	per hour = $$2,040$		
Install Cessna Single-Engine	24 work-hours X \$85	\$920	\$2,960
Service Kit SK182-115	per hour = $$2,040$		
Install Cessna Single-Engine	24 work-hours X \$85	\$500	\$2,540
Service Kit SK206-42C	per hour = $$2,040$		
Install Cessna Single-Engine	24 work-hours X \$85	\$587	\$2,627
Service Kit SK207-19	per hour = $$2,040$		
Install Cessna Single-Engine	24 work-hours X \$85	\$952	\$2,992
Service Kit SK210-156	per hour = $$2,040$		

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to small airplanes, gliders, balloons, airships, domestic business jet transport airplanes, and associated appliances to the Director of the Policy and Innovation Division.

## **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
  - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

# **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

# § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Textron Aviation Inc.**: Docket No. FAA-2017-0049; Product Identifier 2017-CE-031-AD.

## (a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

## (b) Affected ADs

None.

# (c) Applicability

This AD applies to the following Textron Aviation Inc. (type certificate previously held by Cessna Aircraft Company) model airplanes, that are certificated in any category:

Table 1 to paragraph (c) of this AD - Affected Models and Serial Numbers

Model	Serial Numbers
172N	17272885 through 17274009
172P	17274010 through 17276654
172Q	17275869, 17275927 through 17275934, 17275952, 17275959,
	17275960, 17275962, 17275964, 17275965,
	17275967,17275968,17275969,17275971, 17275992,
	17275999,17276002, 17276005, 17276029, 17276032, 17276042,
	17276045, 17276051, 17276052, 17276054, 17276101,17276109,
	17276140, 17276147, 17276188, and 17276211
172RG	691, 172RG0001 through 172RG1191
F172N	F17201910 through F17202039
F172P	F17202040 through F17202254
FR172K	FR17200656 through FR17200675
R172K	R1723200 through R1723454
182E	18253599 through 18254423
182F	18254424 through 18255058
182G	18255059 through 18255844
182H	634 and 18255846 through 18256684
182J	18256685 through 18257625
182K	18255845, 18257626 through 18257698, and 18257700 through
	18258505
182L	18258506 through 18259305
182M	18257699 and 18259306 through 18260055
182N	18260056 through 18260825
182P	675, 18260826 through 18263478, and 18263480 through 18265175
182Q	18263479, 18265176 through 18267301, and 18267303 through
	18267715
182R	18268542 through 18268586
182R/T182	18267302 and 18267716 through 18268541
F182P	F18200001 through F18200025
F182Q	F18200026 through F18200169
F182RG	FR18200001through FR18200070
R182	R18200002 through R18200583
R182/TR182	R18200001 and R18200584 through R18202039
206	206-0001 through 206-0275
P206/TP206	P206-0001 through P206-0603 and P20600604 through P20600647
U206/TU206	676, U206-0276 through U206-1444, and U20601445 through
	U20607020
207/T207	20700001 through 20700788
210-5 (205)	641, 205-0001 through 205-0480, 205-0551, and 205-0556 through 205-0577

210-5A (205A)	205-0481 through 205-0550 and 205-0552 through 205-0555
210B	21057841 through 21058085
210C	21058086 through 21058139 and 21058141 through 21058220
210D	21058221 through 21058510
210E	21058511 through 21058715
210F	21058716 through 21058818
T210F	T210-0001 through T210-0197

## (d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 53, Fuselage.

## (e) Unsafe Condition

This AD was prompted by a report of cracks found in the lower area of the forward cabin doorpost bulkhead. We are issuing this AD to detect and address cracking of the wing strut attach point. The unsafe condition, if not addressed, could result in failure of the wing in operation, which could result in loss of control.

# (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

# (g) Inspections

At the following compliance times, visually inspect the lower forward doorpost at the strut attach fitting for cracks. Do the inspection following Cessna Single Engine Accomplishment Instructions SEB95-19, dated December 29, 1995, and Cessna Single-Engine Accomplishment Instructions SEB93-5R1, dated September 8, 1995, as applicable. During the inspection, pay special attention to the contour of the wing strut support fitting. If cracks are present, they should be visible at the intersection of the doorpost and the forward doorpost bulkhead.

(1) As of the effective date of this AD, airplanes that have accumulated less than 4,000 hours time-in-service (TIS): Initially inspect upon reaching 4,000 hours TIS or within the next 200 hours TIS after the effective date of this AD, whichever occurs later.

(2) As of the effective date of this AD, airplanes that have accumulated 4,000 hours TIS or more: Initially inspect within the next 200 hours TIS after the effective date of this AD or within the next 12 months after the effective date of this AD, whichever occurs first.

## (h) Repair Cracks

If cracks are found during any inspection required in paragraph (g) or paragraph (i) of this AD, before further flight, install the applicable service kit as specified in Cessna Single Engine Accomplishment Instructions SEB95-19, dated December 29, 1995, and Cessna Single-Engine Accomplishment Instructions SEB93-5R1, dated September 8, 1995, as applicable.

# (i) Repetitive Inspections

- (1) If no cracks are found during the initial inspection required in paragraph (g) of this AD, repetitively thereafter inspect every 12 months or 1,000 hours TIS, whichever occurs first, as long as no cracks are found. Do the inspections following the applicable service information specified in paragraph (g) of this AD.
- (2) If cracks were found during any inspection required in paragraph (g) or paragraph (i)(1) of this AD, repetitively thereafter inspect at intervals not to exceed 1,000 hours TIS after installing the applicable service kit. These repetitive inspections should be done following the applicable Accomplishment Instructions of the service information specified in paragraph (g) of this AD to the fullest extent while additionally looking for cracks extending beyond the added repair parts.

## (j) Contacting the Manufacturer

If cracks are found that extend beyond the service kit doublers that were installed as required in paragraph (h) of this AD during any inspection required in paragraph (i)(2) of this AD, before further flight, contact the manufacturer at the address specified in paragraph (m)(2) of this AD for an FAA-approved repair scheme designed specifically for this AD and incorporate that repair.

## (k) Credit for Previous Actions

- (1) For the following Textron Aviation Inc. model airplanes, credit will be given for the initial inspection required by paragraph (g) of this AD if done before the effective date of this AD following the Accomplishment Instructions in Cessna Single Engine Service Bulletin SEB93-5, dated March 26, 1993.
- (i) Model 210-5 (205) airplanes, serial numbers (S/N) 205-0551 and 205-0556 through 205-0577.
  - (ii) Model 206 airplanes, S/N 206-0094 and 206-0138 through 206-0275.
- (iii) Model P206/TP206 airplanes, S/N P206-0001 through P206-0603 and P20600604 through P20600647.
- (iv) Model U206/TU206 airplanes, S/N 676, U206-0276 through U206-1444, and U20601445 through U20607020.
  - (v) Model 207/T207 airplanes, S/N 20700001 through 20700788.
- (2) For Textron Aviation Inc. Model U206/TU206 airplanes, S/N 676, U206-0276 through U206-1444, and U20601445 through U20607020: Credit will be given for the repair required in paragraph (h) of this AD if done before the effective date of this AD following the Accomplishment Instructions in Cessna Single Engine Service Bulletin SEB93-5, dated March 26, 1993.

(3) For Textron Aviation Inc. Model 207/T207 airplanes, S/N 20700001 through 20700788: No credit will be given for the repair required in paragraph (h) of this AD if done before the effective date of this AD following the Accomplishment Instructions in Cessna Single Engine Service Bulletin SEB93-5, dated March 26, 1993.

## (I) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Wichita ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (m) of this AD.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

#### (m) Related Information

- (1) For more information about this AD, contact Bobbie Kroetch, Aerospace Engineer, Wichita ACO Branch, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4155; fax: (316) 946-4107; email: bobbie.kroetch@faa.gov or Wichita-COS@faa.gov.
- (2) For service information identified in this AD, contact Textron Aviation Inc., Textron Aviation Customer Service, One Cessna Blvd., Wichita, Kansas 67215; telephone: (316) 517-5800; email: customercare@txtav.com; Internet: www.txtav.com. You may review this referenced service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on January 24, 2018.

Pat Mullen, Acting Deputy Director, Policy & Innovation Division, Aircraft Certification Service.

[FR Doc. 2018-01923 Filed: 1/31/2018 8:45 am; Publication Date: 2/1/2018]